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Synthesis and properties of hyperbranched polyester polyacrylic acids and their metal complexes

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Abstract

New polydentate ligands based on the hyperbranched third generation polyesters containing terminal acrylic acid fragments were synthesized. The ionization and complexation parameters of new compounds in solution were estimated by spectrophotometry and pH-metric titration followed by experimental data processing using mathematical simulation by the CPESSP program. The procedure for the synthesis was proposed. The polynuclear cobalt(II), nickel(II), and copper(II) complexes with polyester polycarboxylates were synthesized. © 2014 Springer Science+Business Media, Inc.

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Keywords

Hyperbranched polyester polyacrylic acids, Ionization and complexation parameters, Metal complexes